

EXCEL PROJECT 7: Creating a Multiplication Chart Using Mixed Reference Formulas

Objectives Practiced

- Enter and copy mixed reference formulas.
- Preview and print a worksheet.

Xavier is completing his student teaching at Preston Oaks Elementary School. The classroom teacher that he is assisting asks him to create a multiplication chart that can be posted on the wall as a reference and learning aid for the students.

1. Open **EX Project 7.xlsx** from the folder containing your data files, and save it as **Multiplication Chart XXX.xlsx** (replace XXX with your initials).
2. In cell B4, enter a mixed reference formula to multiply the row header (A4) by the column header (B3). Use an absolute column reference for column A and an absolute row reference for row 3.

Hint You create an absolute reference by typing a dollar sign before the column letter or row number.
3. Use the fill handle to copy the formula in cell B4 to the cells C4:N4.
4. Select the range **B4:N4**, if necessary. Drag the fill handle to cell N16 to copy the formula to every cell in the chart.
5. In the range A3:N16, middle align and center the data.
6. Change the worksheet orientation to Landscape and preview the worksheet.
7. Print the worksheet with the gridlines visible.
8. Save and close the workbook, then exit Excel.

EXCEL PROJECT 10: Adding Headers and Footers to a Worksheet and Checking Spelling

Objectives Practiced

- Format cells.
- Add headers and footers.
- Apply conditional formatting.
- Check spelling.

Hugo works for the U.S. Census Bureau and is doing a geological survey of the New England states. He is creating a worksheet of inland waterways that shows the total land area of each state, the water area, and the percent of total area that is water.

1. Open **EX Project 10.xlsx** from the folder containing your data files, and save it as **NE States Wet XXX.xlsx** (replace XXX with your initials).
2. Center, middle align, and wrap the text in cells A1:D1 and format them with the cell style Heading 2.
3. Sort the data in cells A2:D7 in ascending order (A to Z).
4. Apply the Number format with zero decimal places to cells B2:C7.
5. Apply the Percentage format to cells D2:D7.
6. Create a header for the worksheet that displays the text **New England**.
7. Create a footer for the worksheet that displays the current date.
8. Check the spelling of the worksheet and accept the suggested spelling of the two misspelled states.
9. Use conditional formatting to apply blue data bars to represent the cell values in cells D2:D7.
10. Save and close the workbook, then exit Excel.

Critical Thinking

Open the **NE States Wet XXX.xlsx** file. Search the U.S. Geological Survey site at <http://ga.water.usgs.gov/edu/wetstates.html> to get more information about wet states. Add the data about the Mid Atlantic states of New York, Pennsylvania, and New Jersey to the worksheet and change the header to **Northeast**. Save and close the workbook.

EXCEL PROJECT 13: Formatting Recycling Data

Objectives Practiced

- Apply themes and styles.
- Format cells.
- Insert and resize an image.

Randall works for an environmental agency that consults with municipal solid waste companies, to help them better manage waste by implementing environmentally sound practices. His department is working on a recycling program designed to reduce the number of telephones, computers, and cell phones thrown away every year. Randall's supervisor asks him to gather 2006–2007 data on the recycling rates for electronic products for comparison with current rates. Randall needs to format the data attractively in a worksheet for an upcoming conference.

1. Open **EX Project 13.xlsx** from the folder containing your data files, and save it as **Recycling Electronics XXX.xlsx** (replace XXX with your initials).
2. Enter **Total** in cell A9. Bold and right-align the text, and change the font size to 12.
3. In cell B9, display the sum of the values in cells B6:B8, and then use the fill handle to copy the formula to cells C9:D9.
4. Center and bold the data in B9:D9, and change the font size to 12.
5. Apply the Metro theme to the workbook.
6. Change the cell style in cell A1 to Title and the style in cells A2:E2 to Heading 1.
7. Change the cell style of ranges B4:E5 and A6:A8 to Accent1, and change the font size to 12.
8. Insert the **recycle.jpg** picture from the folder containing your data files.
9. Resize the image so its height is 3" and its width is 2.66", and then center it at the bottom of the worksheet so it is displayed approximately within the range B13:D24.
10. Save and close the workbook, then exit Excel.

Hint

To select nonadjacent ranges, select the first range, then press and hold the Ctrl key as you select another range.

EXCEL PROJECT 17: Adding a Chart to a Profit and Loss Statement

Objectives Practiced

- Enter and copy formulas.
- Create a chart.
- Modify a chart.

The Storm Water Management Department for the town of Edmondville encourages citizens to become involved in protecting water resources in the community. Each year, they sponsor a Rain Barrel Make-and-Take workshop where participants make a rain barrel to take home and use as an alternative way to collect storm water runoff from their rooftops. The director, Blaine, is using a worksheet to summarize the income and expenses of the last workshop.

1. Open **EX Project 17.xlsx** from the folder containing your data files, and save it as **Rain Barrel XXX.xlsx** (replace XXX with your initials).
2. In cell B9, create a formula to subtract the estimated expenses (B7) from the estimated profit (B6).
3. Copy the formula in cell B9 to cell C9.
4. If necessary, format cells B9:C9 as Currency with zero decimals.
5. Select the range **A5:C7**, and use it to create a 2-D Clustered Column chart.
6. Change the chart style to Style 6.
7. Move the chart so the upper-left corner is in cell E2.
8. Save and close the workbook, then exit Excel.

EXCEL PROJECT 20: Creating a Pie Chart

Objectives Practiced

- Create a chart.
- Modify a chart.

Vanessa is a financial planner who works with clients to help them achieve their desired investment goals for their retirement accounts. She uses Excel to help illustrate what percentage of investment options make up a client's account.

1. Open **EX Project 20.xlsx** from the folder containing your data files, and save it as **Investment Portfolio XXX.xlsx** (replace XXX with your initials).
2. Create a 2-D pie chart displaying the data in the range A3:B7.
3. Change the chart layout to Layout 6.
4. Change the chart title to **Contribution Allocation**.
5. Change the chart style to Style 11.
6. Resize the chart proportionally to make it approximately twice as large.
7. Move the chart so that it is located approximately in cells C2:O25.
8. Save and close the workbook, then exit Excel.

Hint

To resize a chart proportionally, press and hold the Shift key while dragging a corner handle.

Critical Thinking

Open the **Investment Portfolio XXX.xlsx** file. Experiment with changing the chart type. If there is a chart type you feel better illustrates the data, save the chart with this new type. In cell A11, wrap the text and enter a brief explanation of why you changed the type. If you did not find a better chart type, then enter an explanation in cell A11 as to why you feel the 2-D pie chart type used in the project best suits this data. Save and close the workbook.